



# SYSTEM FOR INCREASING THE ACCURACY OF THE LINE OF SIGHT

*The patent relates to a process for measuring the line of sight of an imaging device*

## Technological advantages

Improves the accuracy of an imaging device and the location of its images when there is uncertainty concerning the line of sight, particularly in the case of a push-broom type sensor.

Measures and corrects the mechanical vibrations affecting an imaging device

Measures the direction of the line of sight of an imaging device

## Summary of the invention

By adding an additional matrix-type sensor alongside the main push-broom type sensor, a well-located wide-field image is obtained. The matrix-type sensor is intended to take low-resolution snapshots of the scene to be observed at regular intervals and to combine the information from these snapshots with the push-broom images (high resolution but with a disturbed line of sight).

This step for merging the information is carried out with the help of numerical correlation algorithms resulting in a well-resolved and well-located image.

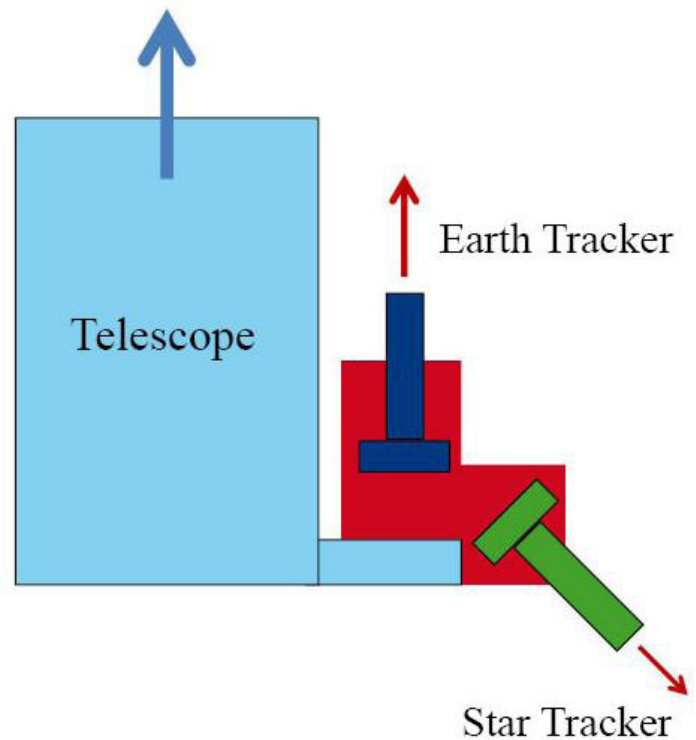
## Potential applications

Multi- or hyper-spectral imaging for drones or aircraft: the patented process reduces the constraints on the onboard inertial measurement unit, thus providing a cheaper and more precise solution for airborne multi- or hyper-spectral sensors.

Visible Imagery from UAVs: a lightweight, compact solution for using push-broom sensors, providing better accuracy while being compatible with the onboard inertial units already installed on drones.

**TRL : 3**

*Patented invention available under licence*



*Principle of acquisition*

## Commercial advantages

Light and compact

Compatible with the onboard inertial units already installed on drones

Low cost